

#12702 Store at -20°C

Prostate Specific Membrane Antigen (D4S1F) Rabbit mAb

✓ 100 µl
(10 western blots)



Orders ■ 877-616-CELL (2355)
orders@cellsignaling.com
Support ■ 877-678-TECH (8324)
info@cellsignaling.com
Web ■ www.cellsignaling.com

New 08/13

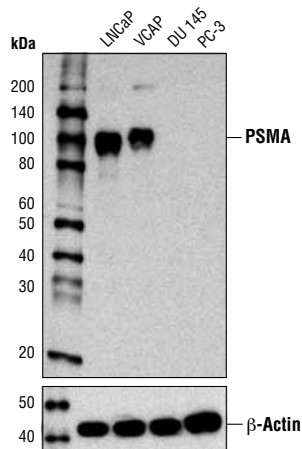
For Research Use Only. Not For Use In Diagnostic Procedures.

Applications W, IF-IC Endogenous	Species Cross-Reactivity* H	Molecular Wt. 100 kDa	Isotype Rabbit IgG**
--	--------------------------------	--------------------------	-------------------------

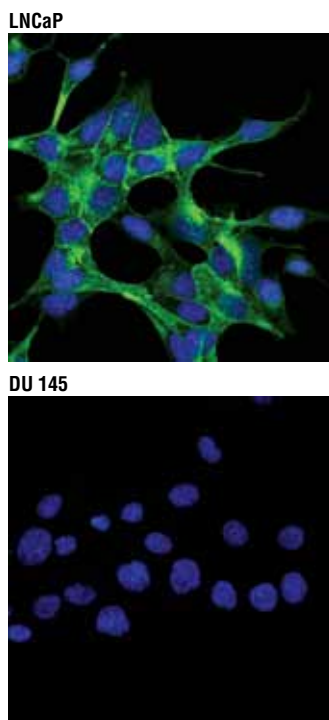
Background: Prostate specific membrane antigen (PSMA, also known as FOLH1), a type II transmembrane protein of the M28 family, has both folate hydrolase and N-acetylated-alpha-linked acidic dipeptidase activity. PSMA was originally identified in the LNCaP cell line, which was derived from a prostate adenocarcinoma lymph node metastasis (1,2). PSMA is an established prostate cancer marker (3); however, it is expressed in other tissues, including kidney, liver, and urinary bladder (4), and it is associated with tumor neovascularity (5) as well. Research studies suggest that PSMA is both a potential diagnostic readout and therapeutic target (6-8).

Specificity/Sensitivity: Prostate Specific Membrane Antigen (D4S1F) Rabbit mAb recognizes endogenous levels of total prostate specific membrane antigen. An SDS resistant dimer at approximately 200 kDa can be detected depending on sample preparation conditions.

Source/Purification: Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues in the extracellular domain of human prostate specific membrane antigen protein.



Western blot analysis of extracts from various cell lines using Prostate Specific Membrane Antigen (D4S1F) Rabbit mAb (upper) or β-Actin (D6A8) Rabbit mAb #8457 (lower)



Confocal immunofluorescent analysis of LNCaP (positive, upper) and DU 145 (negative, lower) cells using PSMA (D4S1F) Rabbit mAb (green). Blue pseudocolor = DRAQ5® #4084 (fluorescent DNA dye).

Entrez Gene ID #2346
UniProt ID #Q04609

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

*Species cross-reactivity is determined by western blot.

**Anti-rabbit secondary antibodies must be used to detect this antibody.

Recommended Antibody Dilutions:

Western blotting	1:1000
Immunofluorescence (IF-IC)	1:400
IF Protocol:	Methanol Permeabilization required

For product specific protocols please see the web page for this product at www.cellsignaling.com.

Please visit www.cellsignaling.com for a complete listing of recommended complementary products.

Background References:

- (1) Horoszewicz, J.S. et al. (1987) *Anticancer Res* 7, 927-35.
- (2) Israeli, R.S. et al. (1993) *Cancer Res* 53, 227-30.
- (3) Ben Jemaa, A. et al. (2010) *J Exp Clin Cancer Res* 29, 171.
- (4) Kinoshita, Y. et al. (2006) *World J Surg* 30, 628-36.
- (5) Chang, S.S. et al. (1999) *Mol Urol* 3, 313-320.
- (6) Mease, R.C. et al. (2013) *Curr Top Med Chem* 13, 951-62.
- (7) Frigerio, B. et al. (2013) *Eur J Cancer* 49, 2223-32.
- (8) Denmeade, S.R. et al. (2012) *Sci Transl Med* 4, 140ra86.

Tween® is a registered trademark of ICI Americas, Inc.

DRAQ5® is a registered trademark of Biostatus Limited.

IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide
Species Cross-Reactivity Key: H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine
Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.